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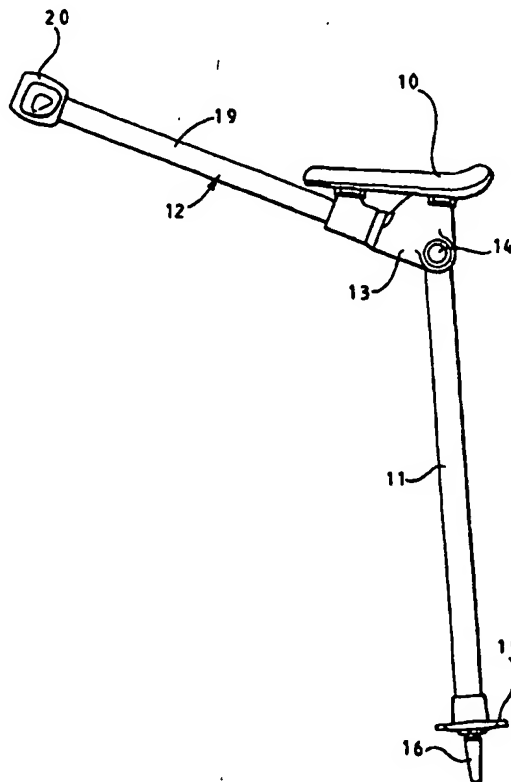
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(21) International Application Number: PCT/GB97/01277 (22) International Filing Date: 13 May 1997 (13.05.97) (30) Priority Data: 9611625.6 4 June 1996 (04.06.96) GB (71)(72) Applicant and Inventor: HAYWOOD, Michael [GB/GB]; Little Thatch, Bushcombe Lane, Woodmancote, Cheltenham GL52 4QL (GB). (74) Agent: A.R. DAVIES & CO.; 27 Imperial Square, Cheltenham GL50 1RQ (GB).		(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report.

(54) Title: A SEAT

(57) Abstract

A seat comprises elongate ground engageable support means (11), elongate stabiliser means (12) pivotably connected at one end to one end of the support means, a seating member (10) secured relative to the stabiliser means or the support means at or adjacent to said one end thereof, and means for releasably locking the stabiliser means in a first position in which it is co-extensive or substantially co-extensive with the elongate support means and in a second position in which it extends at an angle to the support means and forwards of the seating member. The stabiliser means includes, at a position removed from the seating member, leg abutment means (20) for making contact with the front of a seated user's leg.



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A SEAT

This invention relates to a seat and more particularly to a seat which is easily transportable.

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Conventionally seats are in the form of chairs or stools having three or more legs for supporting a seating member in a stable seating position. Shooting sticks having a single elongate ground engageable support and a pair of outwardly foldable seating members at the upper end of the elongate support are also known, but these are neither particularly comfortable nor particularly stable.

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It is also known from my British Patent Specification No. GB 2211725B to provide a seat formed as an integral plastics moulding and comprising a seating member, a ground engageable support depending from the seating member, the seating member alone being incapable of maintaining the seating member in a stable seating position, and a stabiliser. The stabiliser projects forwards of the seating member and includes, at a position removed from the seating member, a leg abutment for making contact with the front of a seated user's leg at or above the knee joint. This seat is more comfortable and stable than shooting sticks but suffers from the drawbacks that it is expensive to make and relatively difficult for a user to carry.

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According to the present invention there is provided a seat comprising elongate ground engageable support means, elongate stabiliser means pivotably connected at one end to one end of the support means, a seating member secured

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relative to the stabiliser means or the support means at or adjacent to said one end thereof, and means for releasably locking the stabiliser means in a first position in which it is co-extensive or substantially co-extensive with the elongate support means and in a second position in which it extends at an angle to the support means and
5 forwards of the seating member, the stabiliser means including, at a position removed from the seating member, leg abutment means for making contact with the front of a seated user's leg.

Preferably, the seating member is secured relative to the stabiliser means
10 but it could be secured relative to the support means particularly if a slot is provided in the seating member for the stabiliser means to pass through.

Preferably, the stabiliser means is adapted to extend between a seated user's
15 legs.

Preferably, the leg abutment means is adapted to make contact with the
front of both legs of a seated user at or above the knee joints.

Preferably, the support means is pivotable and, to a limited extent, slidable
20 relative to the stabiliser means and the releasable locking means, preferably, comprises sockets (or projections) on the stabiliser means, which sockets (or projections) can be selectively engaged by the support means.

Conveniently, the lower end of the support means is provided with a ground

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engageable spike covered by a removable cover having a non-slip base.

The invention will now be more particularly described, by way of example,
with reference to the accompanying drawings, in which:

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Figure 1 is a side view showing one embodiment of a seat according to the
present invention, in a first position;

Figure 2 is a rear view of the seat shown in Figure 1;

10

Figure 3 is a plan view of the seat shown in Figure 1;

Figure 4 is a side view of the seat shown in Figure 1, in a second position;

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Figure 5 is a fragmentary sectional view taken along line V-V of Figure 2
showing one embodiment of the releasable locking means between the ground
engageable support and the stabiliser on an enlarged scale;

20

Figure 6 is a fragmentary sectional view taken along line VI - VI of Figure
4 also showing the releasable locking means between the ground engageable support
and the stabiliser on an enlarged scale;

Figure 7 is a fragmentary sectional view on an enlarged scale taken along
the line VII - VII of Figure 4 and showing a removable cover over the ground spike,

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and

Figure 8 is a sectional view taken along the line VII - VII of Figure 7.

5 Referring to the drawings, the seat shown therein comprises a seating member 10, a ground engageable support in the form of a single tubular leg 11, and a stabiliser 12.

The seating member 10 is in the form of a plastics moulding and is secured
10 to a hollow bracket 13 at one end of the stabiliser 12.

The ground engageable support 11 is pivotally connected, at a position adjacent to its upper end, to the bracket 13 by a pivot pin 14.

15 The tubular leg 11 is closed at its lower end by a ground engageable plate 15 having an upstanding skirt portion 15a which receives the lower end of the leg 11 as a tight push fit. A ground spike 16 is threadably engaged with the plate 15 to extend below the lower end of the leg 11 coaxially therewith. The ground spike 16 is covered by a removable cover 17 having a sleeve portion 17a, a pivotable locking
20 lever 17b and a cap 17c of rubber or other non-slip material. The locking lever 17b is pivotable about a rivet 17d between the position shown in Figure 7 in which it engages in an annular recess at the upper end of the ground spike 16 to lock the cover 17 on the ground spike 16 and a position in which it no longer engages in the annular recess so as to allow the cover 17 to be removed from the spike 16. A user can apply

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pressure with his/her feet to the ground plate 15 to press the spike 16 into soft ground when the cover 17 is removed from the spike 16.

The stabiliser 12 includes the bracket 13 and also comprises a single tubular member 19 and a cross-member 20 secured to the end of the tubular member 19 remote from the bracket 13.

The cross-member 20, which forms a leg abutment, extends to each side of the tubular member 19 by an equal distance and is contoured so as to be comfortable when pressed against the legs of a user.

Releasable locking means (to be described in more detail hereinafter) are provided between the upper end of the ground engageable support 11 and the bracket 13 to releasably lock the stabiliser 12 in a first position in which it is co-extensive or substantially co-extensive with the ground engageable support 11, as shown in Figure 4, and in a second position in which it extends at an angle, typically an angle of about 115° , to the ground engageable support 11 and forwards of the seating member 10, as shown in figures 1 to 3.

The releasable locking means between the support 11 and stabiliser 12 is shown in Figures 5 and 6.

The support 11 is pivotable and, to a limited extent, slidable relative to the bracket 13. This limited slidable movement is provided by two elongate slots 23 in

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the support 11 which slots receive the pivot pin 14 which is secured between opposite sides of the bracket 13. The upper end of the support 11 is engageable in one of two sockets 24 and 25 in the bracket 13 and is urged towards such an engaged position by a compression spring 26 acting between a spring seat 27 secured to the upper end of the support 11 and a pivot block 28 which is pivotable about the pivot pin 14 but which, unlike the support 11, is not slidable relative to the pivot pin 14. Thus, when the support 11 is pulled out of one of the sockets 24, 25 the spring 26 is compressed. A curved track 29 is provided between the two sockets 24 and 25 to guide the upper end of the support from one socket to the other. When the upper end of the support 11 reaches the other socket, the spring 26 urges the end of the support 11 into the other socket. The pivot block 28 also serves to spread side load over a length of the support tube 11.

It will be readily appreciated that the ground engageable support 11 is alone incapable of maintaining the seating member 10 in a stable seating position. However, in an operative position, a user is seated on the seating member 10 with the tubular member 19 extending between the user's legs and the cross-member 20 making contact with the front of the user's legs at or above the knee joints. To arrive at this position the user may start by holding the forward end of the stabiliser 12 in one hand with the support 11 to the rear in contact with the ground. The user would then pass one leg around the rear of the support 11 and move into a seated position coming into contact with the seating member 10 and at the same time lowering the cross-member 20 onto his/her legs at or just above the knee. The user's feet may then be positioned slightly apart and in a position affording most comfort. Once seated

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most of the user's weight is supported by the support 11 but the remaining weight is transferred to the user's legs to provide stability. To leave the seat, the user is able to take hold of the forward end of the stabiliser 12 and stand up.

5 When the seat is in its inoperative position, shown in Figure 4, it takes the form of a walking stick and can be easily carried by a user. It can also be readily transformed into a seat, as shown in Figures 1 to 3, when required..

10 When the seat is in its operative position, shown in Figures 1 to 3, a table or tools (not shown) can be placed on or attached to the tubular member 19 or the cross-member 20.

15 The seat described above has a stabiliser which includes a single tubular member 19 which is adapted to extend between a user's legs. However, the stabiliser could be in the form of one or more tubular members which extend to one or both sides of a user's legs and which is/are provided with abutment means at positions removed from the seating member 10 for making contact with one or both of the user's legs.

20 Other modifications will be apparent to a person skilled in the art without departing from the scope of the invention. For example, the seating member 10 could be secured to the leg 11 instead of to the stabiliser 12. In this case, the seating member 10 will probably need to be provided with a slot in order for the stabiliser 12 to pass therethrough. Also, the leg 11 could be adjustable in length. In this case, the

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leg could comprise two telescopic members and means for releasably locking the two telescopic members in any one of a plurality of positions. Also, a wheel or ski could be connected to the lower end of the leg 11.

CLAIMS

1. A seat comprising elongate ground engageable support means (11), elongate stabiliser means (12) pivotably connected at one end to one end of the support means,
5 a seating member (10) secured relative to the stabiliser means or the support means at or adjacent to said one end thereof, and means for releasably locking the stabiliser means in a first position in which it is co-extensive or substantially co-extensive with the elongate support means and in a second position in which it extends at an angle to the support means and forwards of the seating member, the stabiliser means
10 including, at a position removed from the seating member, leg abutment means (20) for making contact with the front of a seated user's leg.
2. A seat as claimed in claim 1, wherein the seating member (10) is secured relative to the stabiliser means (12).
15
3. A seat as claimed in claim 1 or claim 2, wherein the stabiliser means (12) is adapted to extend between a seated user's legs.
4. A seat as claimed in any one of the preceding claims, wherein the leg
20 abutment means (20) is adapted to make contact with the front of both legs of a seated user at or above the knee joints.
5. A seat as claimed in any one of the preceding claims, wherein the support means (11) is pivotable and, to a limited extent, slidable relative to the stabiliser

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means (12).

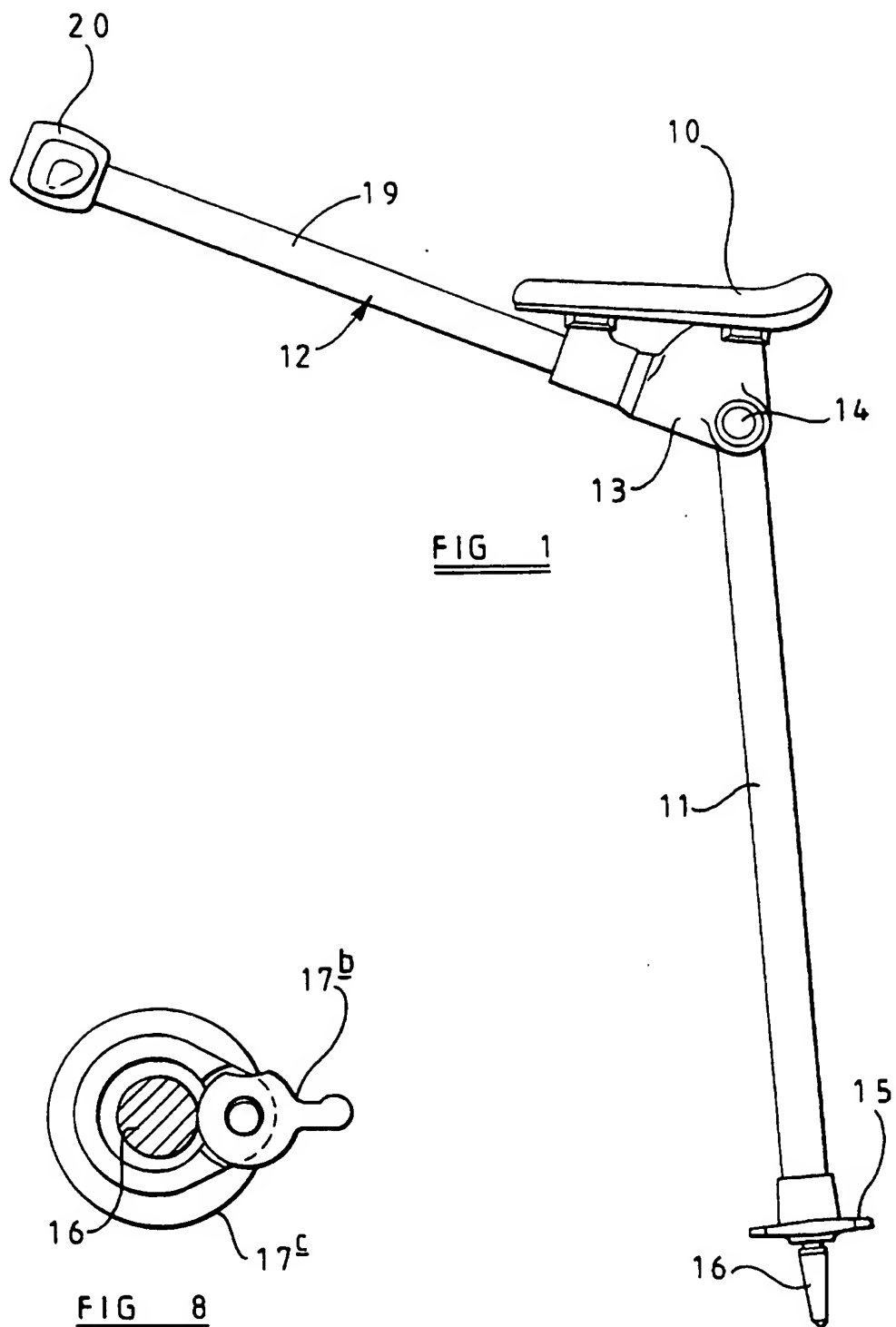
6. A seat as claimed in claim 5, wherein the releasable locking means comprises two sockets (or projections) (24,25) on the stabiliser means, which sockets
5 (or projections) can be selectively engaged by the support means (11).

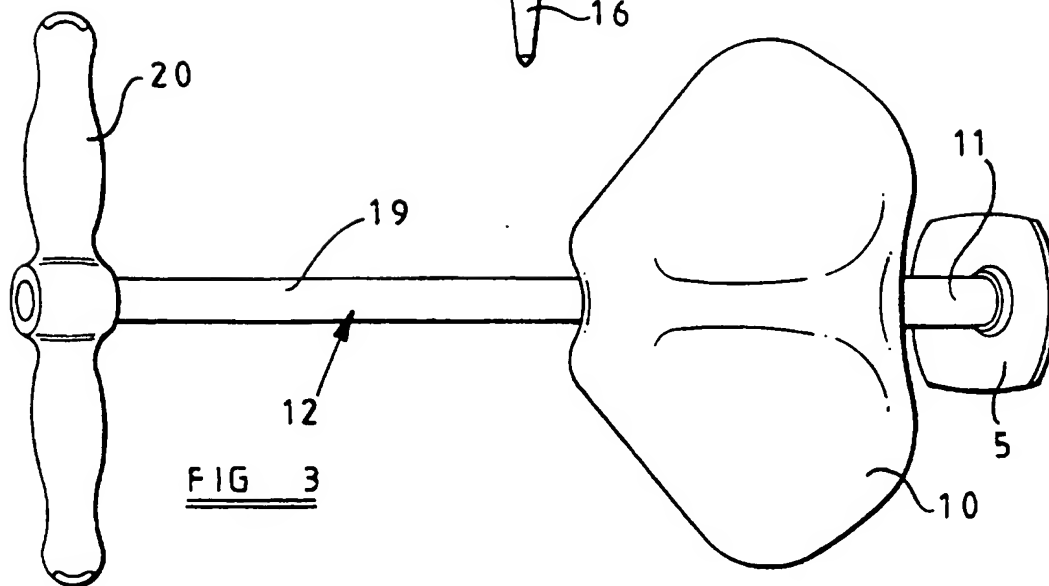
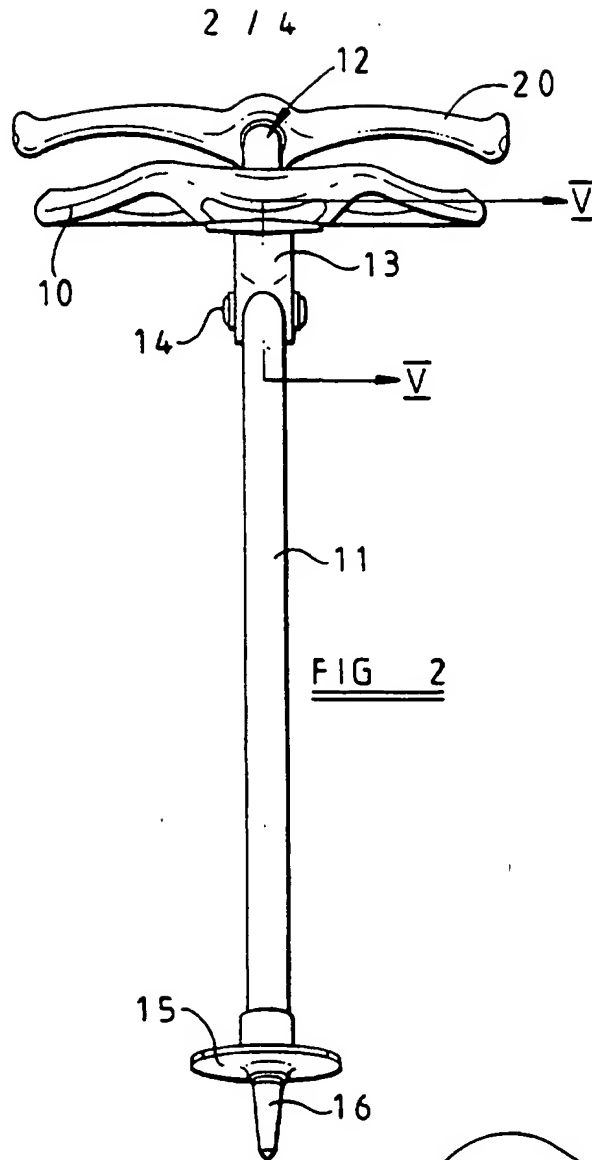
7. A seat as claimed in claim 6, wherein the support means is urged by spring means (26) into engagement with one of the sockets (or one of the projections).

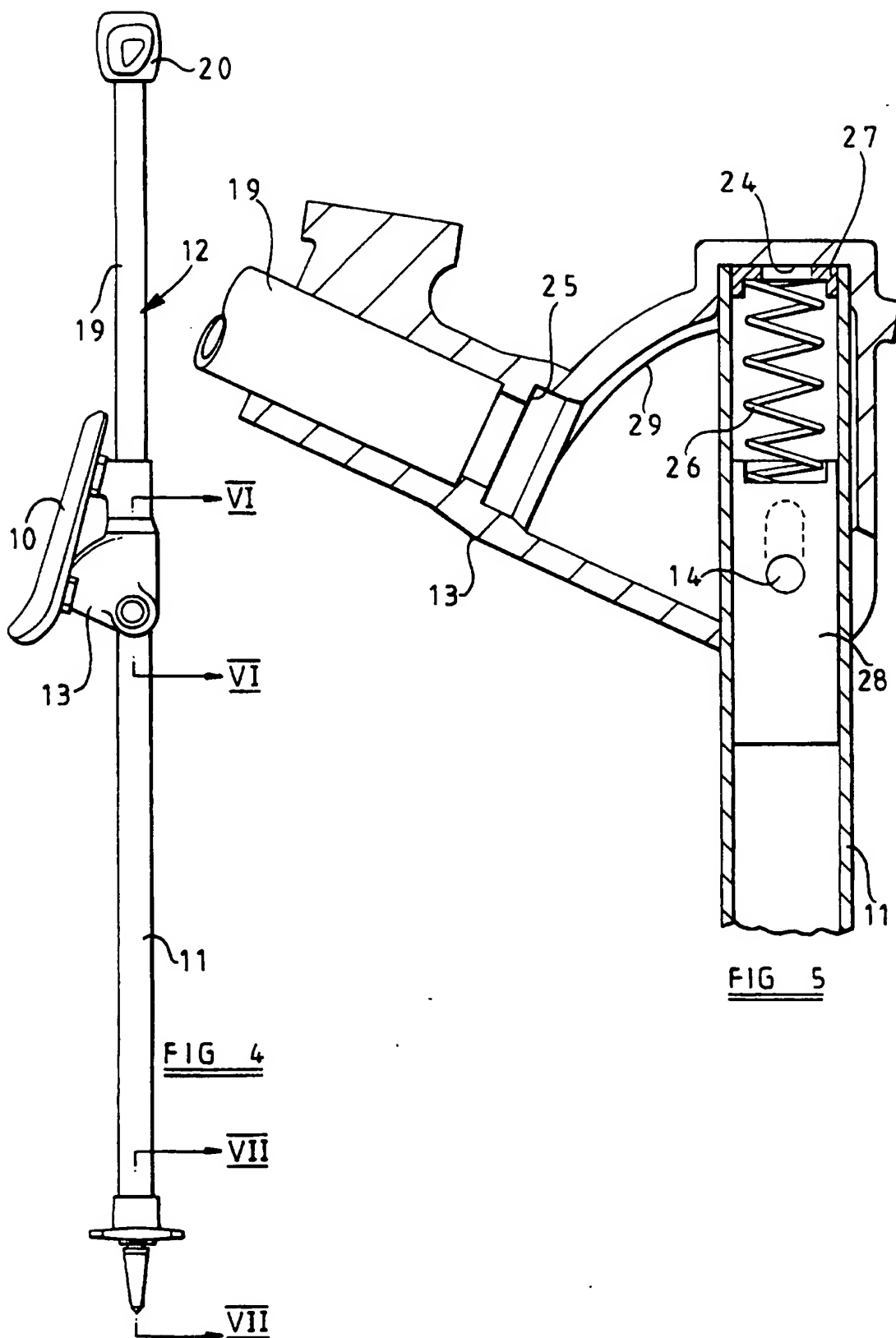
10 8. A seat as claimed in claim 6 or claim 7, wherein a curved track (29) is provided to guide the support means between the two sockets (or projections).

9. A seat as claimed in any one of the preceding claims, wherein the lower end of the support means is provided with a ground engageable spike (16) covered by a
15 removable cover (17) having a non-slip base.

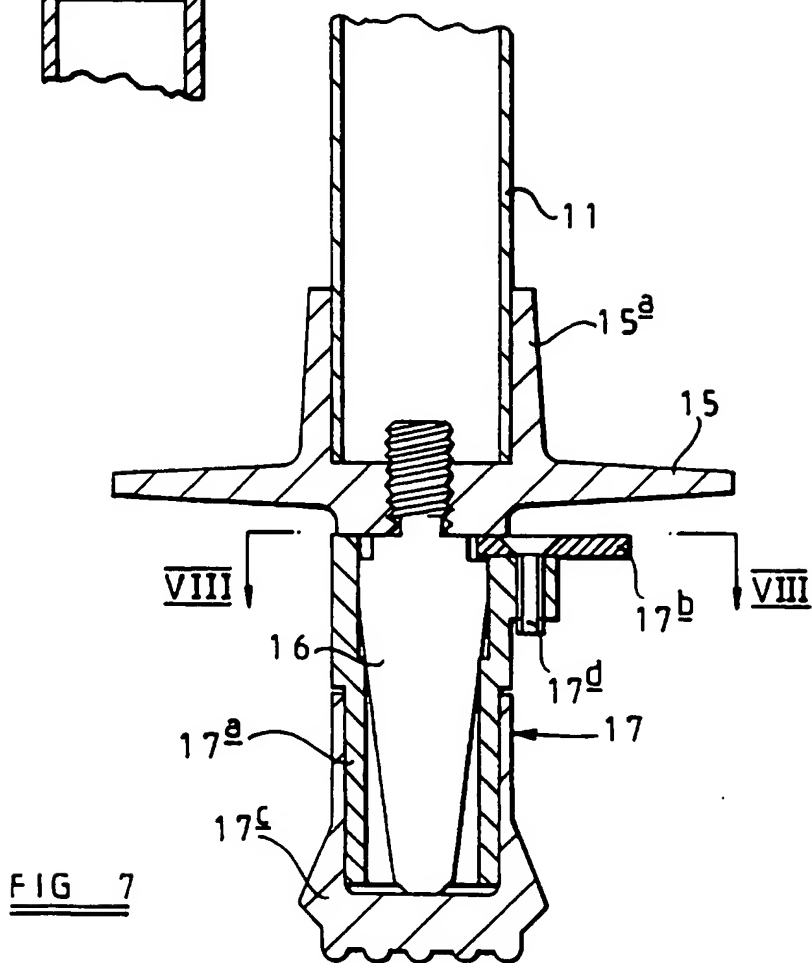
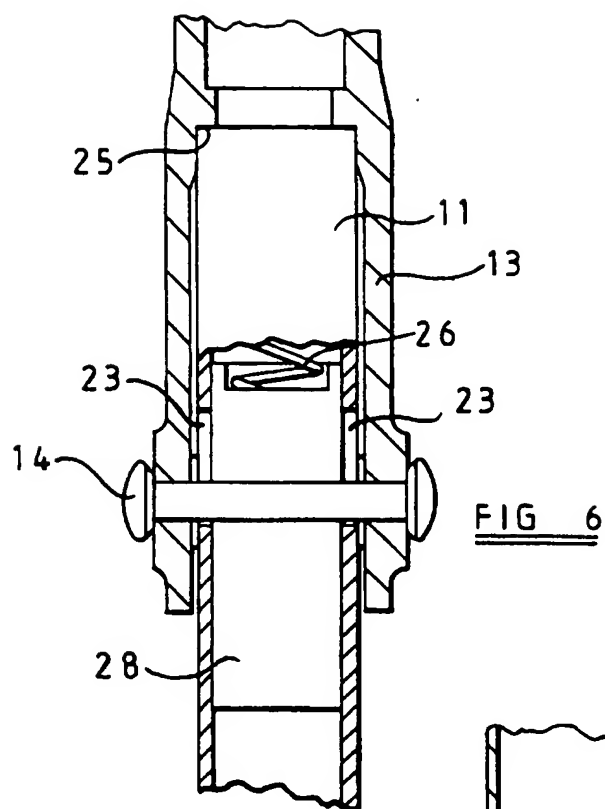
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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB 97/01277

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A47C9/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A47C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 211 725 A (HAYWOOD) 12 July 1989 cited in the application see page 4, line 9 - page 5, line 15; figures 3,4	1
A	WO 84 04235 A (OPSVIK) 8 November 1984 see figures 1-3	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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